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CENTRAL FAX CENTER

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Application No. 09/988,681  
Docket No. DP-827US

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**REMARKS**

Claims 15-23 are presently pending in this application. Claims 15-17 and 19-20 have been amended to more particularly define the claimed invention.

It is noted that the amendments are made only to more particularly define the invention and not for distinguishing the invention over the prior art, for narrowing the scope of the claims, or for any reason related to a statutory requirement for patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 15 and 22-23 stand rejected under 35 U.S.C. §103(e) as being obvious over Kaschke, U.S. Pat. No. 5,999,821, further in view of Azima et al., WO 00/02417.

Claims 16 and 19 stand rejected under 35 U.S.C. §103(a) as being obvious over Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, further in view of Azima, U.S. Pat. No. 6,332,029.

Claims 17-18 and 20-21 stand rejected under 35 U.S.C. §103(e) as being unpatentable over Kaschke, U.S. Pat. No. 5,999,821, Azima et al., WO 00/02417, Azima, U.S. Pat. No. 6,332,029, and further in view of Porrazzo et al., U.S. Pat. No. 5,872,855.

These rejections are respectfully traversed in view of the following discussion.

**I. APPLICANT'S CLAIMED INVENTION**

The claimed invention (as defined, for example, by independent claim 15) is directed to an electronic device including, a main body, a display disposed on the main body for displaying information, a plate member having a transparent central section overlying the

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display and a colored section adjacent the transparent central section and positioned other than overlying the display, and a driving unit connected to the colored section of the plate member for vibrating the plate member to cause the plate member to create a sound in response to an audio signal. The driving unit includes a planar voice coil, and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil. This allows the configuration of the planar voice coil and the first and second magnets to be compactly fit within a small place between the first and second supporting sections, (Application at page 7, lines 1-11.)

## II. THE ALLEGED PRIOR ART REJECTIONS

### A. 35 U.S.C. § 103(a) Rejection over Kaschke, U.S. Pat. No. 5,999,821 further in view of Azima et al., WO 00/02417

The Examiner alleges that Kaschke, U.S. Pat. No. 5,999,821, (Kaschke), further in view of Azima et al., WO 00/02417, (Azima '417), teaches the invention of claims 15 and 22-23.

Applicant submits, however, that Kaschke further in view of Azima, '417 does not teach or suggest, "the driving unit comprising a planar voice coil, and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil."

Kaschke discloses an electrode acoustic transducer 322, but fails to teach or suggest a driving unit comprising a planar voice coil and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil.

Azima '417 discloses a coil vibration exciter 48 attached to a transparent cover 46, and a resilient suspension 50. However, Azima '417 fails to teach or suggest a driving unit comprising a planar voice coil and a first magnet disposed inside the planar voice coil and a

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second magnet disposed outside the planar voice coil.

Therefore, Applicant respectfully requests Examiner to reconsider and withdraw this rejection since the alleged prior art reference fails to teach or suggest each and every element and feature of Applicant's claimed invention.

**B. 35 U.S.C. § 103(a) Rejection over Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417 further in view of Azima, U.S. Pat. No. 6,332,029**

The Examiner alleges that Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, (Kaschke and Azima '417), further in view of Azima, U.S. Pat. No. 6,332,029, (Azima, '029), teaches the invention of claims 16 and 19.

With respect to Applicant's independent claim 15, Applicant submits, however, that Kaschke and Azima '417 further in view of Azima, '029 does not teach or suggest, "the driving unit comprising a planar voice coil, and a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil."

Azima '029 discloses in Figs. 11a-11c a transducer 9 attached to a panel 2 having a magnet assembly comprising of a single magnet 15 and a pair of magnetic poles 14 oppositely disposed on magnet 15 for acting on both sides of coil former 18 fixed to opposed surface skin 21. Azima '029 fails to teach or suggest, a first magnet disposed inside the planar voice coil and a second magnet disposed outside the planar voice coil.

Therefore, Applicant respectfully requests Examiner to reconsider and withdraw this rejection since the alleged prior art reference fails to teach or suggest each and every element and feature of Applicant's claimed invention.

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**C. 35 U.S.C. § 103(a) Rejection over Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, Azima, U.S. Pat. No. 6,332,029 and further in view of Porrazzo et al., U.S. Pat. No. 5,872,855**

The Examiner alleges that Kaschke, U.S. Pat. No. 5,999,821 and Azima et al., WO 00/02417, (Kaschke and Azima '417), Azima, U.S. Pat. No. 6,332,029, (Azima, '029) further in view of Porrazzo et al., U.S. Pat. No. 5,872,855 (Porrazzo), teaches the invention of claims 17-18 and 20-21.

Applicant submits, however, that Kaschke and Azima '417, Azima, '029 and further in view of Porrazzo does not teach or suggest, "the planar voice coil comprises a shape of a quadrilateral frame fixedly attached to the plate member and the first and second magnets are quadrilateral shaped complementary to the shape of the planar voice coil," of Applicant's claim 17 and 20.

The Examiner alleges the following section in Porrazzo teaches a voice coil in the shape of a quadrilateral frame:

In order to add versatility to the performance of the loudspeaker in the present invention, voice coils can be added to the surface of the sound driver. Such an arrangement is shown in FIG. 2B where planar coils 101 are formed on the surface of sound driver 106. (Column 6, lines 7-11.)

The Examiner subsequently states that, "the voice coil is a planar coil, which means that said coil will be in a two-dimensional plane, squares, rectangles, and quadrilateral's have two-dimensional planes and thus said planar coil can be square, rectangular, or quadrilateral shaped."

Porrazzo teaches a voice coil being a planar coil, however, there is no other teaching or suggestion in Porrazzo that the planar coils 101 may be formed into a quadrilateral shape. Additionally, there is no other teaching in Porrazzo or in any other references cited in the present application, wherein the first and second magnets are quadrilateral shaped

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complementary to the shape of the planar voice coil.

Therefore, Applicant respectfully requests Examiner to reconsider and withdraw this rejection since the alleged prior art reference fails to teach or suggest each and every element and feature of Applicant's claimed invention.

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**III FORMAL MATTERS AND CONCLUSION**

In view of the foregoing, Applicant submits that claims 15-23, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Date:

July 26, 2006

Respectfully Submitted,

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**CERTIFICATE OF TRANSMISSION**

I certify that I transmitted via facsimile to (571) 273-8300 the enclosed Amendment under 37 C.F.R. § 1.116 to Examiner DEAN, Art Unit 2618, on July 26, 2006.

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